

WE CLAIM:

1. A computer-readable medium having computer-executable components, comprising:

a test case scenario object that comprises test methods that are arranged to test an electronic system;

a test harness that is arranged to provide system test services for the test methods; and

smart attributes that are arranged in a hierarchy that comprises method level attributes that are arranged to modify parameters of a test method and modify execution of the test method, and parameter level attributes that are arranged to modify the parameter input to the test method and to modify a state of an object after the test method has executed.

2. The computer-readable medium of Claim 1, wherein the smart attributes are further arranged to provide a standard way to interact with the smart attributes through a standardized set of interfaces.

3. The computer-readable medium of Claim 1, wherein the hierarchy further comprises test class level attributes that are arranged to modify an instantiated object state.

4. The computer-readable medium of Claim 3, wherein the test class level attributes are further arranged to modify test extraction of the test method.

5. The computer-readable medium of Claim 1, wherein the test methods comprise execution attributes that are arranged to evaluate test method results.

6. The computer-readable medium of Claim 1, wherein the test methods comprise supplemental attributes that are arranged to modify the execution of a test method.
7. The computer-readable medium of Claim 1, wherein the parameter level attributes are arranged to alter the execution of a test method when an exception is thrown.
8. A method for automated testing, comprising:
 - providing smart attributes that comprise method level attributes and parameter level attributes;
 - providing test methods that are arranged to test an electronic system, wherein the test methods are stored in a test case scenario object;
 - providing system test services for the test methods;
 - using the method level attributes to modify parameters of a test method and modify execution of the test method; and
 - using the parameter level attributes to modify the parameter input to the test method and to modify a state of an object after the test method has executed.
9. The method of Claim 8, further comprising providing a standard way to interact with the smart attributes through a standardized set of interfaces.
10. The method of Claim 8, further comprising using test class level attributes to modify an instantiated object state.
11. The method of Claim 10, further comprising using the test class level attributes to modify test extraction of the test method.
12. The method of Claim 8, further comprising using execution attributes to evaluate test method results.

13. The method of Claim 8, further comprising using supplemental attributes to modify the execution of a test method.

14. The method of Claim 8, further comprising using parameter level attributes to alter the execution of a test method when an exception is thrown.

15. A test automation system, comprising:

- a test case scenario object that comprises test methods that are arranged to test an electronic system;
- a test harness that is arranged to provide system test services for the test methods; and
- smart attributes that are arranged in a hierarchy that comprises method level attributes that are arranged to modify parameters of a test method and modify execution of the test method, and parameter level attributes that are arranged to modify the parameter input to the test method and to modify a state of an object after the test method has executed.

16. The system of Claim 15, wherein the smart attributes are further arranged to provide a standard way to interact with the smart attributes through a standardized set of interfaces.

17. The system of Claim 15, wherein the hierarchy further comprises test class level attributes that are arranged to modify an instantiated object state.

18. The system of Claim 17, wherein the test class level attributes are further arranged to modify test extraction of the test method.

19. The system of Claim 15 wherein the test methods comprise execution attributes that are arranged to evaluate test method results.

20. The system of Claim 15 wherein the test methods comprise supplemental attributes that are arranged to modify the execution of a test method.

21. The system of Claim 15 wherein the parameter level attributes are arranged to alter the execution of a test method when an exception is thrown.

22. A test automation system, comprising:

- means for providing smart attributes that comprise method level attributes and parameter level attributes;
- means for providing test methods that are arranged to test an electronic system, wherein the test methods are stored in a test case scenario object;
- means for providing system test services for the test methods;
- means for using the method level attributes to modify parameters of a test method and modify execution of the test method; and
- means for using the parameter level attributes to modify the parameter input to the test method and to modify a state of an object after the test method has executed.

23. The system of Claim 22, further comprising providing a standard way to interact with the smart attributes through a standardized interface means.

24. The system of Claim 22, further comprising means for using test class level attributes to modify an instantiated object state.

25. The system of Claim 24, further comprising means for using the test class level attributes to modify test extraction of the test method.

26. The system of Claim 22, further comprising means for using execution attributes to evaluate test method results.

27. The system of Claim 22, further comprising means for using supplemental attributes to modify the execution of a test method.
28. The system of Claim 22, further comprising means for using parameter level attributes to alter the execution of a test method when an exception is thrown.